

AIWA®

SERVICE MANUAL

S/M Code No. 85-011
DATE OF ISSUE 3/1985

STEREO PREAMPLIFIER

MODEL NO.

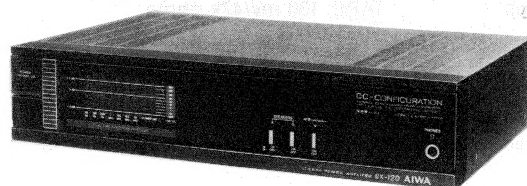
GX-120



STEREO POWER AMPLIFIER

MODEL NO.

BX-120

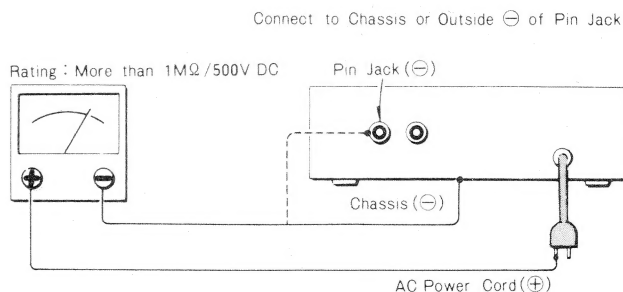


TYPE. HB, UB, EB, KB, ZB

Follow the instructions carefully, which will allow the user to optimise the products' performance and give many years of service.

1. No scratch and melting shall be made to covered lead-wires of an a.c. primary circuit including mains leads.
2. No illegibility shall be given to the specification plate, the caution labels, the fuse labels and others.
3. When, on pattern sides of circuit boards, additional repair-parts have been made up, the parts shall be firmly glued to circuit boards or other components, unless the parts can be attached firmly.
4. The following matters shall be maintained as they are, when repairing.
 - 1) Soldering of lead-wire ends
 - * Care should be taken of the space distance in an a.c. primary circuit as well as soldering.
 - 2) Wiring and holding of lead-wires with wire-clips and binders
 - 3) Materials of lead-wires
 - * e.g.; For UL models, lead-wires to be used shall be approved or accepted by the UL.
 - 4) Location of all kinds of insulators
 - 5) Setting of voltage selector switch
 - * Set the Voltage Selector Switch to 240V, 220V, or 120V, According to your Local Voltage.

5. After repaired, the insulation resistance or leakage current shall be measured with $500 \pm 5V$ D.C and shall be not less than $1M\Omega$.
Measuring Point



6. General instructions for mechanism repair

- 1) E-rings and poly slider washers shall be replaced with new ones, if once those have been removed. — No re-utilization due to unreliability.
- 2) Regular spare-parts shall always be used for repair, because using irregular parts and tampering with the products shall cause deterioration, malfunction and damage.

SPECIFICATIONS

GX-120

Total harmonic distortion:

TUNER, AUX, TAPE PLAY, CD
0.02% (1 kHz)
PHONO (MM)
0.01% (1 kHz, REC OUT)

Frequency response:

30 Hz to 50 kHz
(+0.5/-3 dB)

S/N ratio:

IHF A curve short circuited
GX-120E, H, K, G, U
PHONO (MM) 80 dB
TUNER, AUX, TAPE 83 dB
GX-120Z
PHONO (MM) 76 dB
TUNER, AUX, TAPE 83 dB

Input jacks (Sensitivity/input impedance):

PHONO (MM)
3 mV/47k ohms
TUNER
150 mV/47k ohms
CD
320 mV/27k ohms
TAPE
150 mV/47k ohms
AUX
150 mV/47k ohms
MIC
1 mV/10 kOhm

Output jacks (Level/output impedance):

TAPE: 130 mV/47k ohms
(REC OUT)
OUTPUT: 1 V/47k ohms

RIAA deviation:

±0.5 dB (20 Hz~20 kHz)

- Design and specifications are subject to change without notice.

BX-120

Effective output power: BX-120H

100W+100W (10%, 8 ohms)
BX-120G, E, K, Z
75W+75W (0.009%, 1 kHz, 8 ohms)
< FTC Rule U mode only >
75 Watts per channel,
Min. RMS at 8 ohms, from
20 Hz—20 kHz, with no more
than 0.02% Total Harmonic
Distortion.

Total harmonic distortion:

0.01% (50W+50W,
20 Hz—20 kHz, 8 ohms)

Frequency response:

10 Hz to 50 kHz (-1 dB)

S/N ratio:

IHF 110 dB, A curve short
circuited

Input jacks (Sensitivity/ input impedance):

BX-120H
1V/47k ohms
BX-120G, E, K, Z, U
800 mV/47k ohms

Output jacks (Level/ output impedance):

Headphones 1 mW/1 W (8Ω)
Speakers (A or B) 8 to
16 ohms

Damping Factor:

Speakers (A + B) 16 ohms

Power requirements:

More than 30 (8 ohms, 1 kHz)

BX-120U
AC 120V, 60 Hz
BX-120G, K
AC 240V, 50/60 Hz
BX-120H
AC 120V/220V/240V
switchable, 50/60 Hz

BX-120E, Z
AC 220V, 50/60 Hz

Power consumption:

BX-120G, E, K, Z

350 W

BX-120U

100 W

BX-120H

118 W

Dimensions:

300 (W) × 71 (H) × 200 (D) mm

Weight:

4.5 kg

- Design and specifications are subject to change without notice.

ELECTRICAL MAIN PARTS LIST (GX-120)

- +++ mark denotes a component of assembled part which part code is represented by a previously stated component.
- * -mark means less required items and availabilities may be limited.

CAPACITORS

No mark, U, UF: μ F
P, PF : pF

COILS

MMH: mH
UH : μ H

FUSE

MMA: mA

ELECTRICAL MAIN

| Ref. No. | Part No. | Description | Ref. No. | Part No. | Description | Ref. No. | Part No. | Description | Ref. No. | Part No. | Description | Ref. No. | Part No. | Description |
|------------------------------------|--------------|----------------------------|-------------------------------------|--------------|-----------------------------|-------------------------------------|--------------|----------------------------------|----------------------|--------------|---------------------------------------|--------------------|--------------|-------------|
| === IC === | | | D22 | 87-020-401 | DIODE,1SS176 | C170 | * 87-018-032 | CAP,CERA-SOL S 100P | △ | 82-788-674 | AC CORD (E) (E,Z ONLY) | === IC === | | |
| | 87-020-291 | IC,BA3812L | D23 | 87-027-606 | DIODE,ZENER HZ7C2L | C171 | * 87-015-679 | CAP,ELECT,33-10 | △ | 87-034-708 | AC CORD (K) (K ONLY) | | 87-020-431 | IC |
| | 87-027-350 | IC,IR2406G | D24 | 87-020-401 | DIODE,1SS176 | C172 | * 87-015-679 | CAP,ELECT,33-10 | △ | * 87-085-139 | AC CORD BUSHING D (H,U ONLY) | | 87-027-298 | IC |
| | 87-027-895 | IC,M5218L | D25 | 87-020-401 | DIODE,1SS176 | C173 | * 87-015-698 | CAP,ELECT 4.7-50 | △ | * 87-085-185 | AC CORD BUSHING (E,K,Z ONLY) | | 87-020-429 | IC |
| | 87-027-925 | IC,M5220 | | | | | | | | | | | 87-027-895 | IC |
| | 87-020-145 | IC,M54563 | D26 | 87-020-401 | DIODE,1SS176 | C174 | * 87-015-698 | CAP,ELECT 4.7-50 | △SW22 | 87-031-685 | ROTARY SW (VOLTAGE SELECTOR) (H ONLY) | | 87-027-986 | IC |
| ④ | 87-020-379 | IC,MN6632 | D27 | 87-020-401 | DIODE,1SS176 | C175 | * 87-015-691 | CAP,ELECT 0.1-50 | △T1 | 81-739-641 | TRANSFORMER P.T (H) (H ONLY) | | 87-020-162 | IC |
| | 87-027-986 | IC,NJM4560 | D28 | 87-020-401 | DIODE,1SS176 | C177 | * 87-015-692 | CAP,ELECT 0.22-50V | △T1 | 81-731-607 | TRANSFORMER P.T (U) (U ONLY) | | 87-020-207 | IC |
| ④ | 87-027-989 | IC,TC4027BP | D29 | 87-027-555 | DIODE,ZENER HZ5C2 | C178 | * 87-015-692 | CAP,ELECT 0.22-50V | △T1 | 81-731-608 | TRANSFORMER P.T (E) (E,Z ONLY) | | ④ 87-027-656 | IC |
| | | | | | | | | | | | | | | |
| ④ | 87-020-039 | IC,TC4051BP | D30 | 87-020-401 | DIODE,1SS176 | D34 | * 87-027-889 | LED LN342GP (TAPE) | △T1 | 81-731-609 | TRANSFORMER P.T (K) (K ONLY) | | 87-027-787 | IC |
| ④ | 87-027-656 | IC,TC4066BP | D32 | 87-020-401 | DIODE,1SS176 | D35 | * 87-027-889 | LED LN342GP (TUNER) | | | | | | |
| ④ | 87-027-978 | IC,TC9152P | D33 | 87-020-401 | DIODE,1SS176 | D36 | * 87-027-889 | LED LN342GP (AUX) | | | | | | |
| | | | D35 | 87-020-401 | DIODE,1SS176 | D37 | * 87-027-889 | LED LN342GP (PHONO) | | | | | | |
| === TRANSISTOR === | | | | | | | | | | | | === TRANSISTOR === | | |
| | 89-110-155 | TRANSISTOR,2SA1015,GR | D36 | 87-027-405 | DIODE,ZENER RD2.2EB | D38 | * 87-027-889 | LED LN342GP (CD) | | | | | * 89-503-890 | FE |
| | 89-210-670 | TRANSISTOR,2SB1067 | D37 | 87-020-401 | DIODE,1SS176 | D40 | * 87-020-393 | LED,TLR-206RPH (MUTE) | | | | | 89-110-155 | TR |
| | 89-318-155 | TRANSISTOR,2SC1815,GR | D38 | 87-020-401 | DIODE,1SS176 | D41 | * 87-020-393 | LED,TLR-206RPH (DSL) | | | | | 89-110-203 | TR |
| | 89-320-011 | TRANSISTOR,2SC2001K | D39 | 87-020-401 | DIODE,1SS176 | D42 | * 87-020-393 | LED,TLR-206RPH (GE) | | | | | 89-111-246 | TR |
| | | | | | | | | | | | | | | |
| | 89-309-456 | TRANSISTOR,2SC945L,P | D40 | 87-027-431 | DIODE,ZENER RD-6.2EB | D43 | 87-020-401 | DIODE,1SS176 | | | | | 89-206-882 | TR |
| | 89-408-804 | TRANSISTOR,2SD880,Y | D41 | 87-020-401 | DIODE,1SS176 | D44 | 87-020-401 | DIODE,1SS176 | | | | | 89-318-155 | TR |
| | | | D42 | 87-020-401 | DIODE,1SS176 | D45 | 87-020-401 | DIODE,1SS176 | | | | | 89-318-154 | TR |
| | | | D43 | 87-020-401 | DIODE,1SS176 | D46 | 87-020-401 | DIODE,1SS176 | | | | | 89-320-011 | TR |
| === MAIN CIRCUIT BOARD SECTION === | | | | | | | | | | | | | | |
| PCB-A | * | MAIN CIRCUIT BOARD | D45 | 87-020-401 | DIODE,1SS176 | D47 | 87-020-401 | DIODE,1SS176 | | | | | | |
| C3 | * 87-018-036 | CAP,CERA-SOL S 220P | D51 | 87-027-475 | DIODE,ZENER HZ-6B1 | D80 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-326-326 | TR |
| C4 | * 87-018-036 | CAP,CERA-SOL S 220P | D65 | 87-020-401 | DIODE,1SS176 | D81 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-326-553 | TR |
| C7 | * 87-018-024 | CAP,CERA-SOL S 47P | D66 | 87-027-606 | DIODE,ZENER HZ7C2L | D82 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-333-810 | TR |
| | | | | | | | | | | | | | 89-407-182 | TR |
| C8 | * 87-018-024 | CAP,CERA-SOL S 47P | D67 | 87-027-475 | DIODE,ZENER HZ-6B1 | D83 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-412-753 | TR |
| C53 | * 87-018-044 | CAP,CERA-SOL S 1000P | D68 | 87-020-401 | DIODE,1SS176 | D84 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-413-023 | TR |
| C63 | * 87-018-035 | CAP,CERA-SOL 180P | D69 | 87-020-401 | DIODE,1SS176 | D85 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | | |
| C64 | * 87-018-035 | CAP,CERA-SOL 180P | D70 | 87-020-401 | DIODE,1SS176 | D86 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | | |
| | | | | | | | | | | | | | | |
| C71 | * 87-018-044 | CAP,CERA-SOL S 1000P | D71 | 87-027-431 | DIODE,ZENER RD-6.2EB | D87 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | | |
| C73 | * 87-018-042 | CAP,CERA-SOL S 680P | D72 | 87-020-400 | DIODE,1SR35-200 | D88 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | | |
| C201 | * 87-012-110 | CAP,BEAD 270P (Z ONLY) | D73 | 87-027-376 | DIODE,1B4B41 | D89 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | | |
| C202 | * 87-012-110 | CAP,BEAD 270P (Z ONLY) | D74 | 87-027-393 | DIODE,ZENER HZ4C2 | SW10 | 87-031-897 | PUSH SW,SEA (POWER STANDBY/ON) | | | | | | |
| | | | | | | | | | | | | | | |
| C203 | * 87-018-115 | CAP,CERA-SOL 47P (Z ONLY) | J1 | * 87-049-450 | PIN JACK,4P (PHONO) | SW15 | 87-031-771 | TACT SW EVQ-QSK04M (VOLUME-UP) | | | | | | |
| C204 | * 87-018-115 | CAP,CERA-SOL 47P (Z ONLY) | J2 | +++ | PIN JACK,4P (CD) | SW16 | 87-031-771 | TACT SW EVQ-QSK04M (VOLUME-DOWN) | | | | | | |
| C205 | * 87-018-121 | CAP,CERA-SOL 150P (Z ONLY) | J3 | * 87-049-420 | PIN JACK 4P-14 (AUX) | SW17 | 87-031-771 | TACT SW EVQ-QSK04M (TAPE) | | | | | | |
| C206 | * 87-018-121 | CAP,CERA-SOL 150P (Z ONLY) | J4 | +++ | PIN JACK 4P-14 (REC OUT) | SW18 | 87-031-771 | TACT SW EVQ-QSK04M (PHONO) | | | | | | |
| | | | | | | | | | | | | | | |
| C207 | * 87-018-121 | CAP,CERA-SOL 150P (Z ONLY) | J5 | 81-739-630 | JACK,ASSY (PLAYER SYNC) | SW19 | 87-031-771 | TACT SW EVQ-QSK04M (TUNER) | | | | | | |
| C208 | * 87-018-121 | CAP,CERA-SOL 150P (Z ONLY) | J6 | +++ | JACK,ASSY (REC/PLAY) | SW20 | 87-031-771 | TACT SW EVQ-QSK04M (AUX) | | | | | | |
| C209 | * 87-018-121 | CAP,CERA-SOL 150P (Z ONLY) | J7 | +++ | JACK,ASSY (CONTROL) | SW21 | 87-031-771 | TACT SW EVQ-QSK04M (CD) | | | | | | |
| C210 | * 87-018-121 | CAP,CERA-SOL 150P (Z ONLY) | J8 | +++ | JACK,ASSY (TUNER) | VR15 | 87-021-898 | SLIDE VOLUME 100KB (40HZ) | | | | | | |
| | | | | | | | | | | | | | | |
| D1 | 87-020-401 | DIODE,1SS176 | J9 | +++ | JACK,ASSY (CD SYNC) | VR16 | 87-021-898 | SLIDE VOLUME 100KB (125HZ) | | | | | | |
| D2 | 87-020-401 | DIODE,1SS176 | J10 | +++ | JACK,ASSY (VIDEO SYNC) | VR17 | 87-021-898 | SLIDE VOLUME 100KB (330HZ) | | | | | | |
| D3 | 87-027-225 | DIODE,ZENER 05Z-5.1L (TP) | J11 | +++ | JACK,ASSY (OUTPUT) | VR18 | 87-021-898 | SLIDE VOLUME 100KB (1KHZ) | | | | | | |
| D5 | 87-020-401 | DIODE,1SS176 | J12 | 82-137-609 | 13P SOCKET (REMOTE CONTROL) | VR19 | 87-021-898 | SLIDE VOLUME 100KB (2.5KHZ) | | | | | | |
| | | | | | | | | | | | | | | |
| D6 | 87-020-401 | DIODE,1SS176 | J13 | 82-675-661 | JACK 6.3 (HP) (MIX MIC) | VR20 | 87-021-898 | SLIDE VOLUME 100KB (6.3KHZ) | | | | | | |
| D7 | 87-020-401 | DIODE,1SS176 | SW1 | 81-739-640 | PUSH SW 3 (REC OUT) | VR21 | 87-021-898 | SLIDE VOLUME 100KB (15KHZ) | | | | | | |
| D8 | 87-020-401 | DIODE,1SS176 | SW2 | +++ | PUSH SW 3 (MUTE) | | | | | | | | | |
| D9 | 87-020-401 | DIODE,1SS176 | SW5 | +++ | PUSH SW 3 (DSL) | | | | | | | | | |
| | | | | | | | | | | | | | | |
| D10 | 87-020-401 | DIODE,1SS176 | VR1 | 87-021-922 | VOLUME 50KW (BALANCE) | === POWER CIRCUIT BOARD SECTION === | | | | | | | | |
| D11 | 87-020-401 | DIODE,1SS176 | VR2 | 87-021-921 | VOLUME 10KB (MIC VOLUME) | PCB-C | * | POWER CIRCUIT BOARD | | | | | | |
| D12 | 87-020-401 | DIODE,1SS176 | === FRONT CIRCUIT BOARD SECTION === | | | △CR1 | * 87-019-110 | SPARK KILLER 0.01 D | | | | | | |
| D13 | 87-020-401 | DIODE,1SS176 | PCB-B | 81-740-620 | FRONT CIRCUIT BOARD | △F1 | 87-035-139 | FUSE T2.5A (E,Z ONLY) | | | | | | |
| | | | C141 | * 87-015-696 | CAP,ELECT 2.2-50 | △J14 | * 87-049-017 | AC OUTLET (H,U ONLY) | | | | | | |
| | | | C142 | * 87-015-696 | CAP,ELECT 2.2-50 | | | | | | | | | |
| | | | C145 | * 87-015-431 | CAP,AL 0.68-25 | △J15 | * | +++ | AC OUTLET (H,U ONLY) | | | | | |
| D14 | 87-020-401 | DIODE,1SS176 | | | | △J14 | * 87-049-416 | AC OUTLET (K ONLY) | | | | | | |
| D15 | 87-020-401 | DIODE,1SS176 | | | | △J15 | * | +++ | AC OUTLET (K ONLY) | | | | | |
| D16 | 87-020-401 | DIODE,1SS176 | | | | △J14 | * 87-049-514 | AC OUTLET (E,Z ONLY) | | | | | | |
| D17 | 87-020-401 | DIODE,1SS176 | | | | | | | | | | | | |
| | | | | | | △J15 | * | +++ | AC OUTLET (E,Z ONLY) | | | | | |
| D18 | 87-027-393 | DIODE,ZENER HZ4C2 | | | | | | | | | | | | |
| D19 | 87-020-401 | DIODE,1SS176 | | | | | | | | | | | | |
| D20 | 87-027-555 | DIODE,ZENER HZ5C2 | | | | | | | | | | | | |
| D21 | 87-020-401 | DIODE,1SS176 | C146 | * 87-015-431 | CAP,AL 0.68-25 | | | | | | | | | |
| | | | C155 | * 87-018-040 | CAP,CERA-SOL S 470P | | | | | | | | | |
| | | | C156 | * 87-018-040 | CAP,CERA-SOL S 470P | | | | | | | | | |
| | | | C159 | * 87-018-036 | CAP,CERA-SOL S 220P | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | C160 | * 87-018-036 | CAP,CERA-SOL S 220P | | | | | | | | | |
| | | | C161 | * 87-015-698 | CAP,ELECT 4.7-50 | | | | | | | | | |
| | | | C162 | * 87-015-698 | CAP,ELECT 4.7-50 | | | | | | | | | |
| | | | C169 | * 87-018-032 | CAP,CERA-SOL S 100P | | | | | | | | | |
| | | | | | | △ | 87-034-992 | AC CORD (H) (H ONLY) | | | | J1 | 81-738-630 | JAC |
| | | | | | | △ | 87-303-578 | AC CORD (U) (U ONLY) | | | | J3 | +++ | JAC |

- +++ mark denotes a component of assembled part which part code is represented by a previously stated component.
- * -mark means less required items and availabilities may be limited.

CAPACITORS
No mark, U, UF: μ F
P, PF : pF

COILS
MMH: mH
UH : μ H


FUSE
MMA: mA


ELECTRICAL MAIN PARTS LIST (BX-120)

| Ref. No. | Part No. | Description | Ref. No. | Part No. | Description | Ref. No. | Part No. | Description | Ref. No. | Part No. | Description |
|----------|--------------|-----------------------------|----------|--------------|----------------------------------|----------|--------------|---------------------------------------|------------------------------------|--------------|----------------------------------|
| D22 | 87-020-401 | DIODE,1SS176 | C170 | * 87-018-032 | CAP,CERA-SOL S 100P | △ | 82-788-674 | AC CORD (E) (E,Z ONLY) | === IC === | | |
| D23 | 87-027-606 | DIODE,ZENER HZ7C2L | C171 | * 87-015-679 | CAP,ELECT,33-10 | △ | 87-034-708 | AC CORD (K) (K ONLY) | | | |
| D24 | 87-020-401 | DIODE,1SS176 | C172 | * 87-015-679 | CAP,ELECT,33-10 | △ | * 87-085-139 | AC CORD BUSHING D (H,U ONLY) | | 87-020-431 | IC,BA658 |
| D25 | 87-020-401 | DIODE,1SS176 | C173 | * 87-015-698 | CAP,ELECT 4.7-50 | △ | * 87-085-185 | AC CORD BUSHING (E,K,Z ONLY) | ④ | 87-027-298 | IC,C-MOS4001 NOR |
| D26 | 87-020-401 | DIODE,1SS176 | C174 | * 87-015-698 | CAP,ELECT 4.7-50 | △SW22 | 87-031-685 | ROTARY SW (VOLTAGE SELECTOR) (H ONLY) | | 87-020-429 | IC,LB1290 |
| D27 | 87-020-401 | DIODE,1SS176 | C175 | * 87-015-691 | CAP,ELECT 0.1-50 | △T1 | 81-739-641 | TRANSFORMER P.T (H) (H ONLY) | | 87-027-895 | IC,M5218L |
| D28 | 87-020-401 | DIODE,1SS176 | C177 | * 87-015-692 | CAP,ELECT 0.22-50V | △T1 | 81-731-607 | TRANSFORMER P.T (U) (U ONLY) | | 87-027-986 | IC,NJM4560 |
| D29 | 87-027-555 | DIODE,ZENER HZ5C2 | C178 | * 87-015-692 | CAP,ELECT 0.22-50V | △T1 | 81-731-608 | TRANSFORMER P.T (E) (E,Z ONLY) | | 87-020-162 | IC,STK1070 |
| D30 | 87-020-401 | DIODE,1SS176 | D34 | * 87-027-889 | LED LN342GP (TAPE) | △T1 | 81-731-609 | TRANSFORMER P.T (K) (K ONLY) | ④ | 87-020-207 | IC,TC4022BP |
| D32 | 87-020-401 | DIODE,1SS176 | D35 | * 87-027-889 | LED LN342GP (TUNER) | | | | ④ | 87-027-656 | IC,TC4066BP |
| D33 | 87-020-401 | DIODE,1SS176 | D36 | * 87-027-889 | LED LN342GP (AUX) | | | | | 87-027-787 | IC,UPC1237H |
| D35 | 87-020-401 | DIODE,1SS176 | D37 | * 87-027-889 | LED LN342GP (PHONO) | | | | | | |
| D36 | 87-027-405 | DIODE,ZENER RD2.2EB | D38 | * 87-027-889 | LED LN342GP (CD) | | | | === TRANSISTOR === | | |
| D37 | 87-020-401 | DIODE,1SS176 | D40 | * 87-020-393 | LED,TLR-206RPH (MUTE) | | | | | | |
| D38 | 87-020-401 | DIODE,1SS176 | D41 | * 87-020-393 | LED,TLR-206RPH (DSL) | | | | | * 89-503-890 | FET 2SK389 |
| D39 | 87-020-401 | DIODE,1SS176 | D42 | * 87-020-393 | LED,TLR-206RPH (GE) | | | | | 89-110-155 | TRANSISTOR,2SA1015,GR |
| D40 | 87-027-431 | DIODE,ZENER RD-6.2EB | D43 | 87-020-401 | DIODE,1SS176 | | | | | 89-110-203 | TRANSISTOR,2SA1020,0 (EXCEPT H) |
| D41 | 87-020-401 | DIODE,1SS176 | D44 | 87-020-401 | DIODE,1SS176 | | | | | 89-111-246 | TRANSISTOR,2SA1124,R |
| D42 | 87-020-401 | DIODE,1SS176 | D45 | 87-020-401 | DIODE,1SS176 | | | | | 89-206-882 | TRANSISTOR,2SB688 (EXCEPT H) |
| D43 | 87-020-401 | DIODE,1SS176 | D46 | 87-020-401 | DIODE,1SS176 | | | | | 89-318-155 | TRANSISTOR,2SC1815,GR |
| D45 | 87-020-401 | DIODE,1SS176 | D47 | 87-020-401 | DIODE,1SS176 | | | | | 89-318-154 | TRANSISTOR,2SC1815,Y |
| D51 | 87-027-475 | DIODE,ZENER HZ-6B1 | D80 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-320-011 | TRANSISTOR,2SC2001K |
| D65 | 87-020-401 | DIODE,1SS176 | D81 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-326-326 | TRANSISTOR,2SC2632,R |
| D66 | 87-027-606 | DIODE,ZENER HZ7C2L | D82 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-326-553 | TRANSISTOR,2SC2655(O) (EXCEPT H) |
| D67 | 87-027-475 | DIODE,ZENER HZ-6B1 | D83 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-333-810 | TRANSISTOR,2SC3381 |
| D68 | 87-020-401 | DIODE,1SS176 | D84 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-407-182 | TRANSISTOR,2SD718 (EXCEPT H) |
| D69 | 87-020-401 | DIODE,1SS176 | D85 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-412-753 | TRANSISTOR,2SD1275 |
| D70 | 87-020-401 | DIODE,1SS176 | D86 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | | 89-413-023 | TRANSISTOR,2SD1302S |
| D71 | 87-027-431 | DIODE,ZENER RD-6.2EB | D87 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | === MAIN CIRCUIT BOARD SECTION === | | |
| D72 | 87-020-400 | DIODE,1SR35-200 | D88 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | PCB-A | * | MAIN CIRCUIT BOARD |
| D73 | 87-027-376 | DIODE,1B4B41 | D89 | * 87-020-399 | LED,LN350GPH (VOLUME LEVEL) | | | | C92 | * 87-018-131 | CAP,CERA-SOL SS 1000P |
| D74 | 87-027-393 | DIODE,ZENER HZ4C2 | SW10 | 87-031-897 | PUSH SW,SEA (POWER STANDBY/ON) | | | | C93 | * 87-015-450 | CAP,ELECT 220-25V BP |
| J1 | * 87-049-450 | PIN JACK,4P (PHONO) | SW15 | 87-031-771 | TACT SW EVQ-QSK04M (VOLUME-UP) | | | | C171 | * 87-010-276 | CAP,ELECT 56V-5600 |
| J2 | +++ | PIN JACK,4P (CD) | SW16 | 87-031-771 | TACT SW EVQ-QSK04M (VOLUME-DOWN) | | | | | | |
| J3 | * 87-049-420 | PIN JACK 4P-14 (AUX) | SW17 | 87-031-771 | TACT SW EVQ-QSK04M (TAPE) | | | | C172 | * 87-010-275 | CAP,ELECT 56V-8200 |
| J4 | +++ | PIN JACK 4P-14 (REC OUT) | SW18 | 87-031-771 | TACT SW EVQ-QSK04M (PHONO) | | | | C173 | * 87-010-276 | CAP,ELECT 56V-5600 |
| J5 | 81-739-630 | JACK,ASSY (PLAYER SYNC) | SW19 | 87-031-771 | TACT SW EVQ-QSK04M (TUNER) | | | | C174 | * 87-010-275 | CAP,ELECT 56V-8200 |
| J6 | +++ | JACK,ASSY (REC/PLAY) | SW20 | 87-031-771 | TACT SW EVQ-QSK04M (AUX) | | | | C181 | * 89-663-815 | CAP,CERA-SOL 0.01UF |
| J7 | +++ | JACK,ASSY (CONTROL) | SW21 | 87-031-771 | TACT SW EVQ-QSK04M (CD) | | | | | | |
| J8 | +++ | JACK,ASSY (TUNER) | VR15 | 87-021-898 | SLIDE VOLUME 100KB (40HZ) | | | | C201 | * 87-010-035 | CAP,ELECT 2.2/50V |
| J9 | +++ | JACK,ASSY (CD SYNC) | VR16 | 87-021-898 | SLIDE VOLUME 100KB (125HZ) | | | | D25 | 87-020-110 | DIODE,1SS177 |
| J10 | +++ | JACK,ASSY (VIDEO SYNC) | VR17 | 87-021-898 | SLIDE VOLUME 100KB (330HZ) | | | | D26 | 87-020-110 | DIODE,1SS177 |
| J11 | +++ | JACK,ASSY (OUTPUT) | VR18 | 87-021-898 | SLIDE VOLUME 100KB (1KHZ) | | | | D30 | 87-027-369 | DIODE,ZENER 05Z-6.2L |
| J12 | 82-137-609 | 13P SOCKET (REMOTE CONTROL) | VR19 | 87-021-898 | SLIDE VOLUME 100KB (2.5KHZ) | | | | | | |
| J13 | 82-675-661 | JACK 6.3 (HP) (MIX MIC) | VR20 | 87-021-898 | SLIDE VOLUME 100KB (6.3KHZ) | | | | D31 | 87-020-110 | DIODE,1SS177 |
| SW1 | 81-739-640 | PUSH SW 3 (REC OUT) | VR21 | 87-021-898 | SLIDE VOLUME 100KB (15KHZ) | | | | D32 | 87-020-110 | DIODE,1SS177 |
| SW2 | +++ | PUSH SW 3 (MUTE) | | | | | | | D33 | 87-020-110 | DIODE,1SS177 |
| SW5 | +++ | PUSH SW 3 (DSL) | | | | | | | D34 | 87-020-400 | DIODE,1SR35-200 |
| VR1 | 87-021-922 | VOLUME 50KW (BALANCE) | | | | | | | | | |
| VR2 | 87-021-921 | VOLUME 10KB (MIC VOLUME) | | | | | | | D48 | 87-020-400 | DIODE,1SR35-200 |
| | | | | | | | | | D49 | 87-027-788 | DIODE,05FB20 |
| | | | | | | | | | D51 | 87-020-400 | DIODE,1SR35-200 |
| | | | | | | | | | D52 | 87-020-400 | DIODE,1SR35-200 |
| | | | | | | | | | | | |
| | | | | | | | | | D53 | 87-020-110 | DIODE,1SS177 |
| | | | | | | | | | D54 | 87-020-110 | DIODE,1SS177 |
| | | | | | | | | | D55 | 87-027-097 | DIODE,1S1555 |
| | | | | | | | | | D56 | 87-027-555 | DIODE,ZENER HZ5C2 |
| | | | | | | | | | | | |
| | | | | | | | | | D57 | 87-027-686 | DIODE,ZENER HZ12A1 |
| | | | | | | | | | D58 | 87-020-110 | DIODE,1SS177 |
| | | | | | | | | | D59 | 87-020-110 | DIODE,1SS177 |
| | | | | | | | | | D60 | 87-020-110 | DIODE,1SS177 (EXCEPT H) |
| | | | | | | | | | D61 | 87-020-110 | DIODE,1SS177 (EXCEPT H) |
| | | | | | | | | | D62 | 87-020-110 | DIODE,1SS177 (EXCEPT H) |
| | | | | | | | | | D63 | 87-020-110 | DIODE,1SS177 (EXCEPT H) |
| | | | | | | | | | D64 | 87-027-479 | DIODE,ZENER HZ27-2 (EXCEPT H) |
| | | | | | | | | | | | |
| | | | | | | | | | J1 | 81-738-630 | JACK PLATE,ASSY (INPUT) |
| | | | | | | | | | J3 | +++ | JACK PLATE,ASSY (SPEAKERS A(L)) |

C-MOS IC handling precaution

The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260℃) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark ().

 **Safety component symbol**

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

The parts on the electrical parts list which are indicated by an asterisk (*) are supplied as one single combined circuit board. Therefore, they will not be supplied separately. If this becomes necessary, please order the entire circuit board.


Combination circuit board 81-729-610
PCB-A 81-739-611
PCB-B 81-739-612

| | |
|---------------------------|-----------------------|
| Combination circuit board | 81-738-610 |
| PCB-A | 81-738-611 |
| PCB-B | 81-738-612 |
| PCB-C | 81-738-613 |
| PCB-D | 81-738-614 |
| PCB-E | 81-738-616 (EXCEPT H) |
| PCB-F | 81-738-617 (EXCEPT H) |
| PCB-G | 81-738-618 (H ONLY) |

| Description | Ref. No. | Part No. | Description | Ref. No. | Part No. | Description |
|--|--|--------------|-----------------------------------|--|--------------|----------------------------------|
| (SPEAKERS A(R))) L (SPEAKERS B) | △S11 | 87-031-897 | PUSH SW,SEA (POWER STANDBY/ON) | △F4 | 87-035-191 | FUSE,T3.15A (E,K,Z ONLY) |
| | === DRIVER-1 CIRCUIT BOARD SECTION === | | | === VOLTAGE SELECTOR CIRCUIT BOARD SECTION (H ONLY) === | | |
| | PCB-C | * | DRIVER-1 CIRCUIT BOARD | PCB-G | * | VOLTAGE SELECTOR CIRCUIT BOARD |
| | C3 | * 87-015-380 | CAP,ELECT BP 4.7-25V | | 82-304-743 | 1P TERMINAL |
| | C7 | * 87-018-121 | CAP,CERA-SOL SS 150P | △F1 | 87-033-147 | FUSE CLAMP |
| | C9 | * 87-018-124 | CAP,CERA-SOL SS 270P | △F1 | 87-035-312 | FUSE, 7A |
| | C13 | * 87-018-117 | CAP,CERA-SOL SS 68P | △F2 | 87-035-256 | FUSE,3.15A |
| | C17 | * 87-018-104 | CAP,CERA-SOL SS 10P | △S12 | 87-031-685 | ROTARY SWITCH (VOLTAGE SELECTOR) |
| | C19 | * 87-018-099 | CAP,CERA-SOL 3.9P | | | |
| | C21 | * 87-018-097 | CAP,CERA-SOL SS 2.2P | | | |
| | C25 | * 87-018-129 | CAP,CERA-SOL 680P | === MISCELLANEOUS === | | |
| | C35 | * 87-015-691 | CAP,ELECT 0.1-50 | △ | * 87-034-578 | AC CORD,U (U ONLY) |
| | C53 | * 87-018-106 | CAP,CERA-SOL SS 15P | △ | * 82-788-674 | AC CORD,E50 (E,Z ONLY) |
| | C59 | * 87-018-123 | CAP,CERA-SOL SS 220P | △ | * 87-034-708 | AC CORD,K50B (K ONLY) |
| | D1 | 87-027-469 | DIODE,ZENER HZ16-2 | △ | * 87-085-184 | AC CORD BUSHING,D (H,U ONLY) |
| | D3 | 87-020-110 | DIODE,1SS177 | △ | * 87-085-185 | AC CORD BUSHING (E,K,Z ONLY) |
| | D5 | 87-027-469 | DIODE,ZENER HZ16-2 | △T1 | * 81-738-606 | TRANSFORMER PT,H (H ONLY) |
| | D7 | 87-020-110 | DIODE,1SS177 | △T1 | * 81-738-607 | TRANSFORMER PT,U (U ONLY) |
| | D15 | 87-027-625 | DIODE,ZENER 05Z-6.8U | △T1 | * 81-738-608 | TRANSFORMER PT,E (E,Z ONLY) |
| | D17 | 87-027-625 | DIODE,ZENER 05Z-6.8U | △T1 | * 81-738-609 | TRANSFORMER PT,K (K ONLY) |
| | △R43 | * 87-029-112 | RES,FUSIBLE 1/4W-330 | | | |
| | SFR1 | * 87-021-856 | SFR 100 | | | |
| | === DRIVER-2 CIRCUIT BOARD SECTION === | | | Note; Combination Circuit Board | | |
| | PCB-D | * | DRIVER-2 CIRCUIT BAORD | The parts on the electrical parts list which are indicated by an asterisk (*) are supplied as one single combined circuit board. Therefore, they will not be supplied separately. If this becomes necessary,please order the entire circuit board. | | |
| | C4 | * 87-015-380 | CAP,ELECT BP 4.7-25V | [GX-120] | | |
| | D2 | 87-027-469 | DIODE,ZENER HZ16-2 | Combination circuit board 81-729-610 | | |
| | D4 | 87-020-110 | DIODE 1SS177 | PCB-A 81-739-611 | | |
| | D6 | 87-027-469 | DIODE,ZENER HZ16-2 | PCB-B 81-739-612 | | |
| | D8 | 87-020-110 | DIODE,1SS177 | [BX-120] | | |
| | C8 | * 87-018-121 | CAP,CERA-SOL SS 150P | Combination circuit board 81-738-610 | | |
| | C10 | * 87-018-124 | CAP,CERA-SOL SS 270P | PCB-A 81-738-611 | | |
| | C14 | * 87-018-117 | CAP,CERA-SOL SS 68P | PCB-B 81-738-612 | | |
| | C18 | * 87-018-104 | CAP,CERA-SOL SS 10P | PCB-C 81-738-613 | | |
| | C20 | * 87-018-099 | CAP,CERA-SOL 3.9P | PCB-D 81-738-614 | | |
| | C22 | * 87-018-097 | CAP,CERA-SOL SS 2.2P | PCB-E 81-738-616 (EXCEPT H) | | |
| | C26 | * 87-018-129 | CAP,CERA-SOL 680P | PCB-F 81-738-617 (EXCEPT H) | | |
| | C36 | * 87-015-691 | CAP,ELECT 0.1-50 | PCB-G 81-738-618 (H ONLY) | | |
| | C54 | * 87-018-106 | CAP,CERA-SOL SS 15P | | | |
| | C60 | * 87-018-123 | CAP,CERA-SOL SS 220P | | | |
| | D16 | 87-027-625 | DIODE,ZENER,05Z-6.8U | | | |
| | D18 | 87-027-625 | DIODE,ZENER 05Z-6.8U | | | |
| | △R44 | * 87-029-112 | RES,FUSIBLE 1/4W-330 | | | |
| | SFR2 | * 87-021-856 | SFR 100 | | | |
| | === FUSE CIRCUIT BOARD SECTION === | | | | | |
| | PCB-E | * | FUSE CIRCUIT BOARD (EXCEPT H) | | | |
| | | 82-304-743 | 1P TERMINAL (EXCEPT H) | | | |
| | △F1 | 87-033-147 | FUSE CLAMP (EXCEPT H) | | | |
| | △F1 | 87-035-313 | FUSE,5A (U ONLY) | | | |
| | △F1 | 87-035-190 | FUSE,T2A (E,K,Z ONLY) | | | |
| | === FUSE SUB CIRCUIT BOARD SECTION === | | | | | |
| | PCB-F | * | FUSE SUB CIRCUIT BOARD (EXCEPT H) | | | |
| | D65 | 87-027-185 | DIODE,30D2FA (EXCEPT H) | | | |
| | D66 | 87-027-185 | DIODE,30D2FA (EXCEPT H) | | | |
| | D67 | 87-027-185 | DIODE,30D2FA (EXCEPT H) | | | |
| | D68 | 87-027-185 | DIODE,30D2FA (EXCEPT H) | | | |
| | △F3 | 87-035-303 | FUSE,4A (U ONLY) | | | |
| | △F3 | 87-035-191 | FUSE,T3.15A (E,K,Z ONLY) | | | |
| | △F4 | 87-035-303 | FUSE,4A (U ONLY) | | | |

C-MOS IC handling precaution

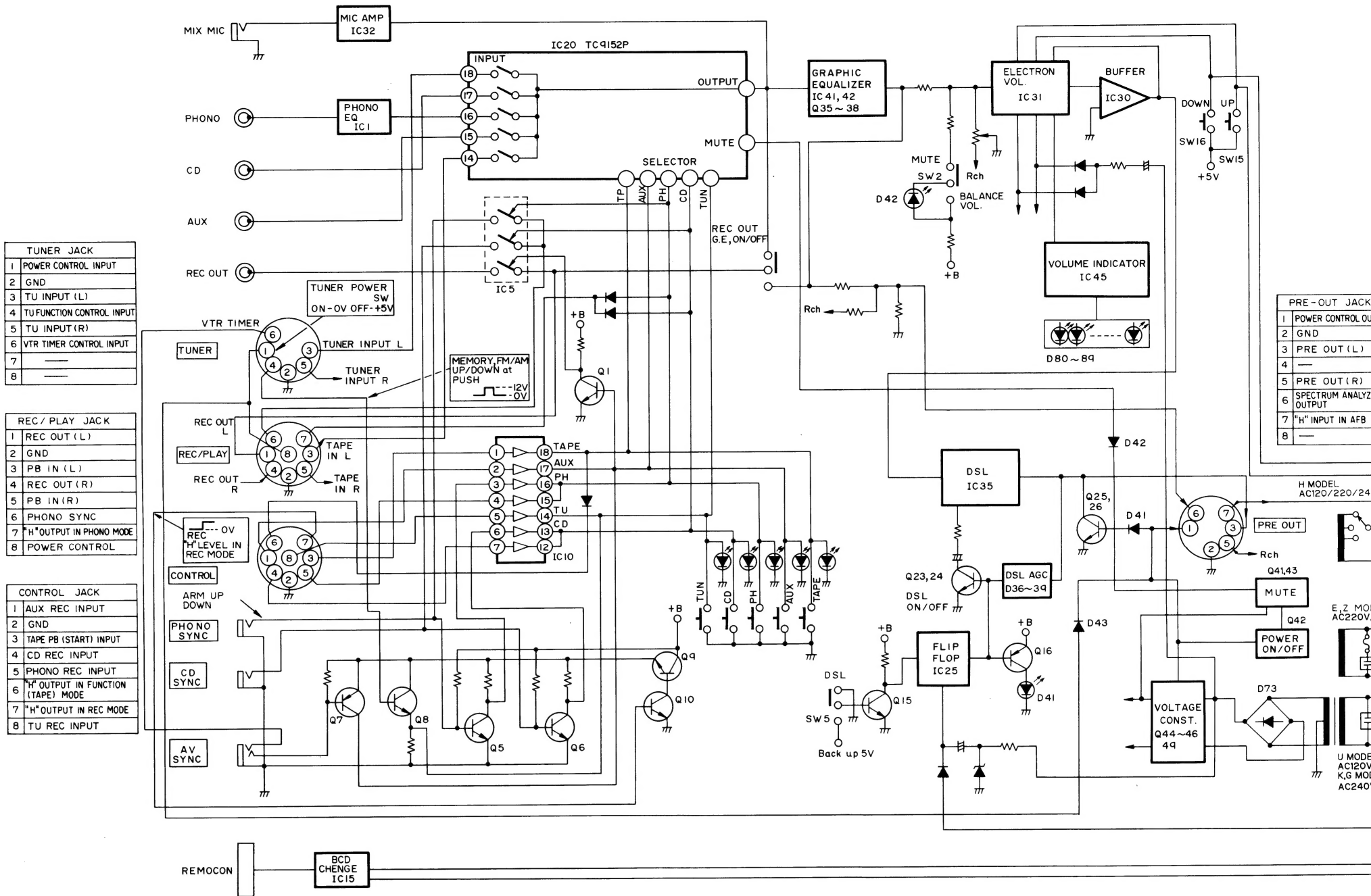
The C-MOS IC's construction makes this part susceptible to damage by static electricity and so take sufficient care in regard to following articles.

1. Need to be put on conductive sheet, to be put in a metallic box and to be wrapped by aluminium foil for transportation and deposit.
2. To use solder iron less than 40W (less than 260℃) of power consumption for soldering. But do not overheat more than 10 second.
3. Do not perform a conductivity test with a tester, etc. Refer to the circuit voltages of each part.
4. The ICs on the electrical parts which are indicated by an C-MOS IC symbol mark ().

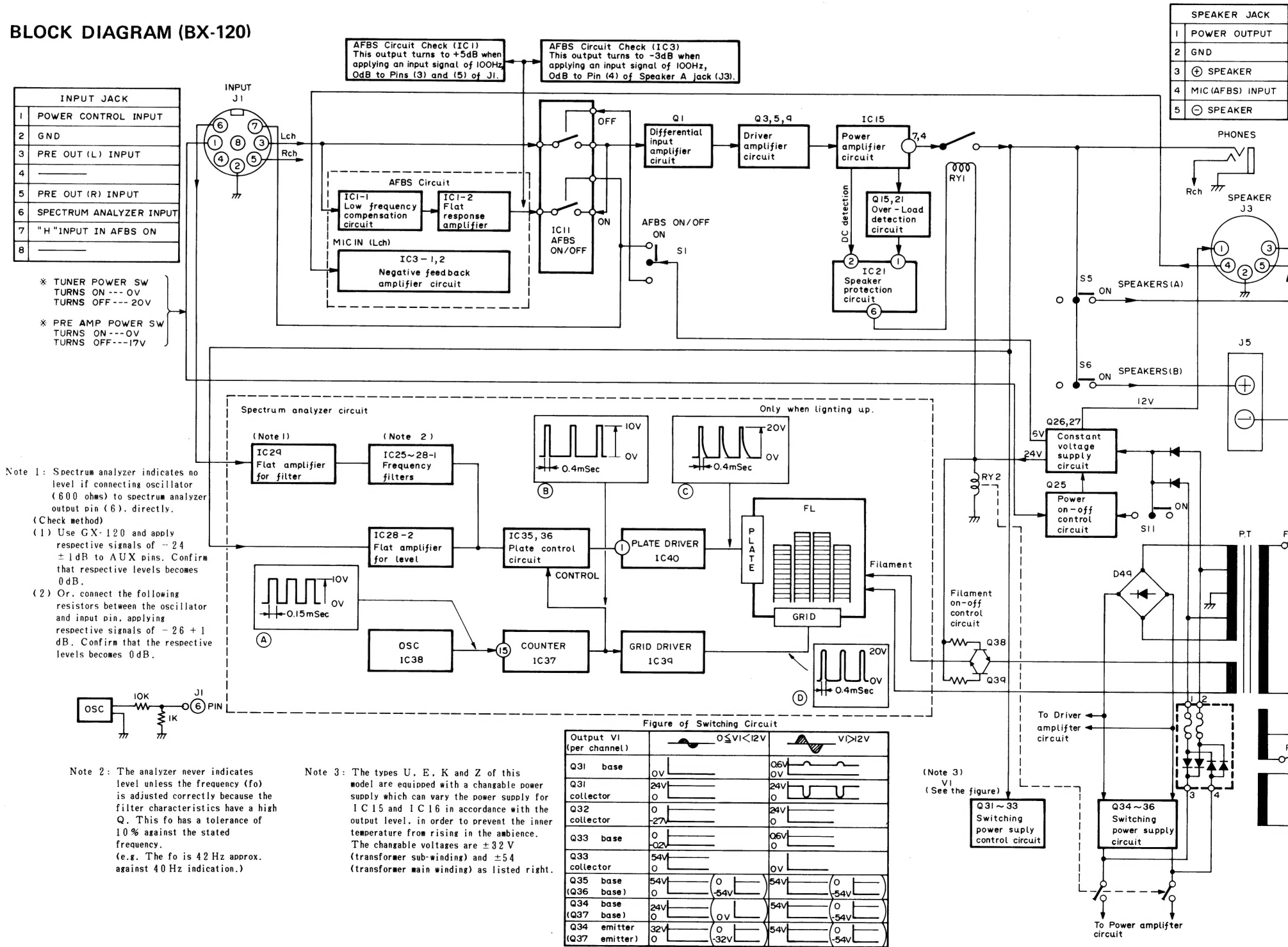
 Safety component symbol

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BLOCK DIAGRAM (GX-120)

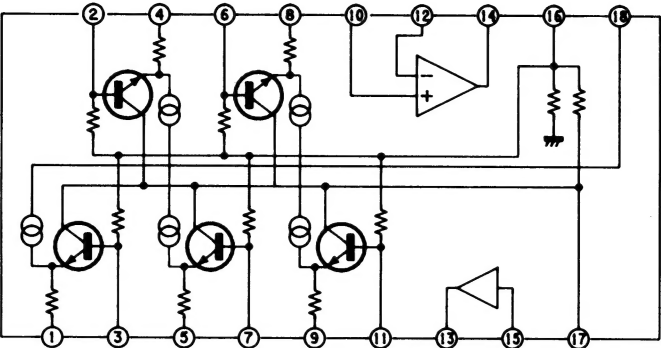


BLOCK DIAGRAM (BX-120)

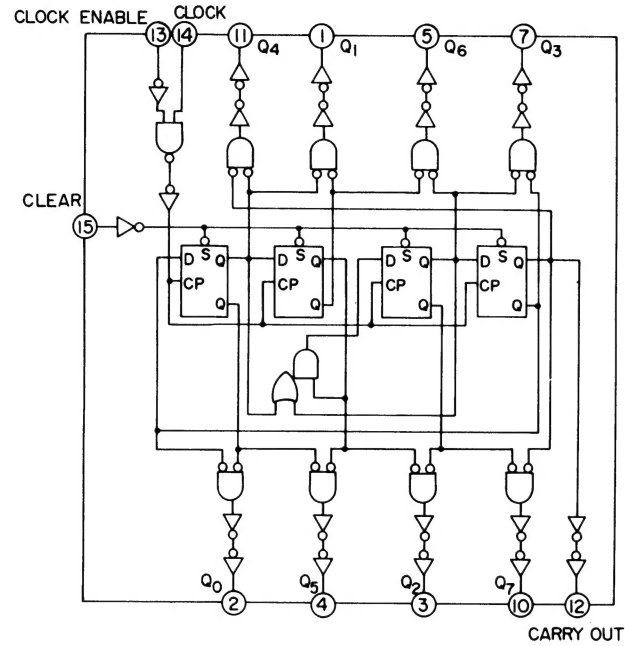


IC BLOCK DIAGRAM

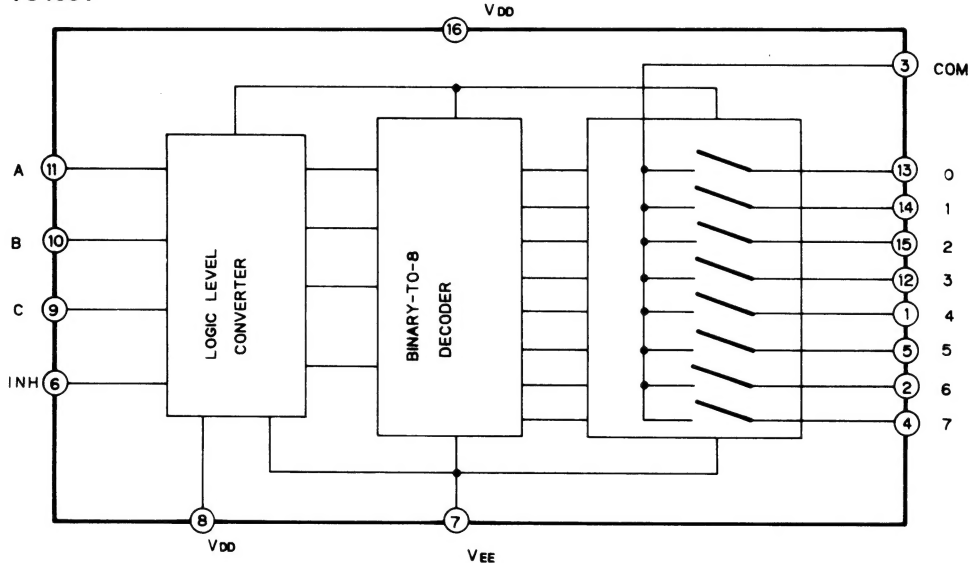
BA3812L



TC4022BP



TC4051



TRUTH TABLE

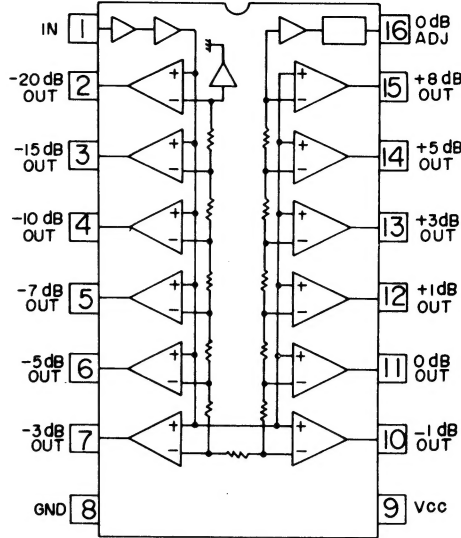
| CONTROL INPUTS | | | | "ON" CHANNEL |
|----------------|---|---|---|--------------|
| INHIBIT | C | B | A | |
| L | L | L | L | 0 |
| L | L | L | H | 1 |
| L | L | H | L | 2 |
| L | L | H | H | 3 |
| L | H | L | L | 4 |
| L | H | L | H | 5 |
| L | H | H | L | 6 |
| L | H | H | H | 7 |
| H | * | * | * | NOTE |

* Don't Care

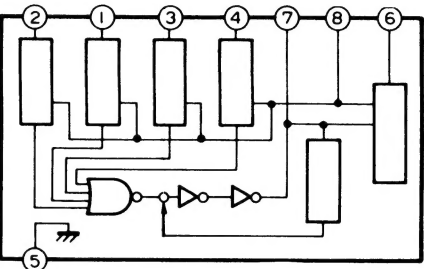
NOTES:

- The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.
- Resistors with no designation have a rated power of 1/8W and a tolerance of $\pm 5\%$.
- Capacitors with no designation have a dielectric strength of less than 50WV.
- The only capacitor tolerance indicated are $\pm 5\%$ (J) and $\pm 10\%$ (K).
- Ceramic capacitor symbols:
 - High dielectric constant system (YY)
 - High dielectric constant system (YW, YP, YZ)
 - Semiconductor ceramic
- Explanation of symbols:
 - Mylar capacitor
 - Aluminum solid capacitor
 - Polypropylene film capacitor
 - Bi-polarized capacitor
 - Low-leakage capacitor
 - Tantalum capacitor
 - Styrol capacitor

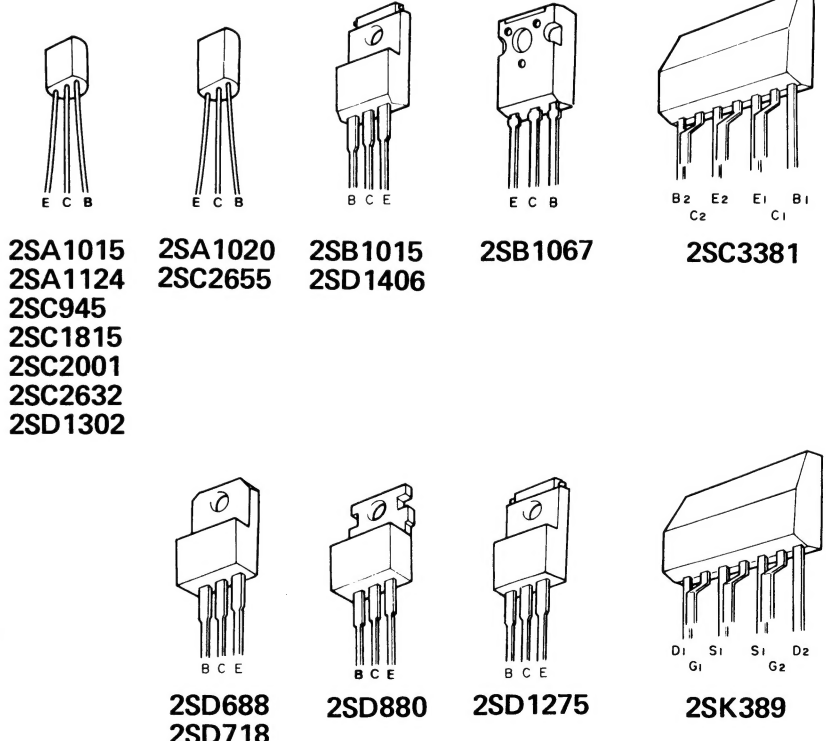
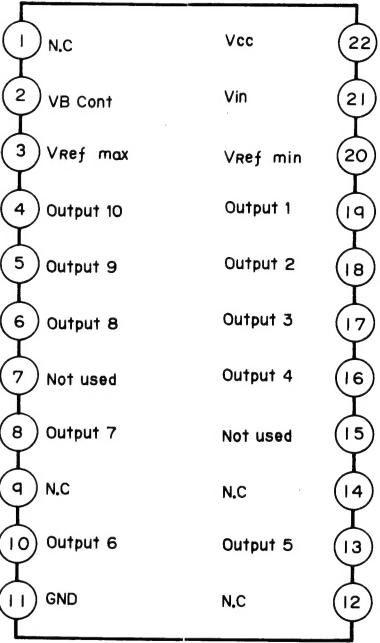
BA658



μPC 1237H

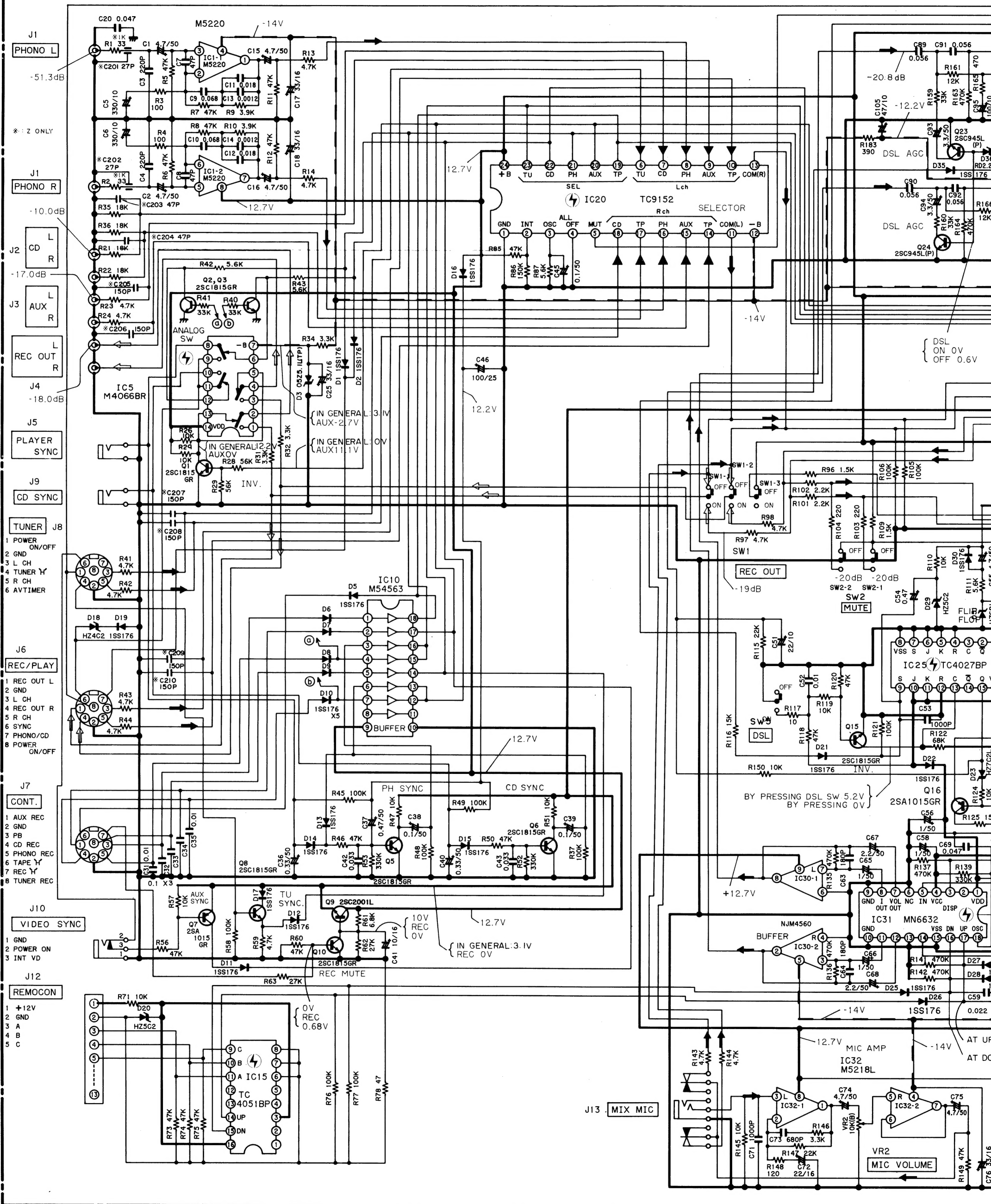


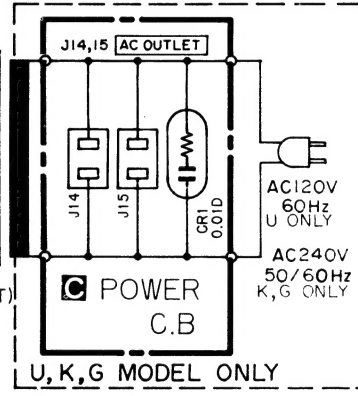
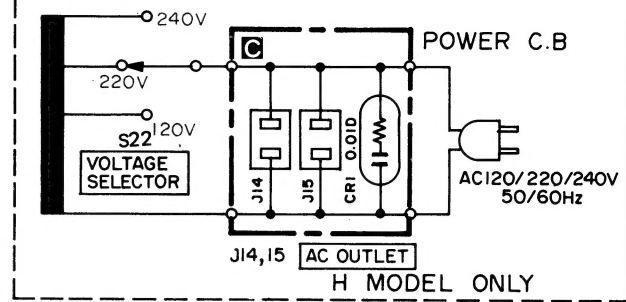
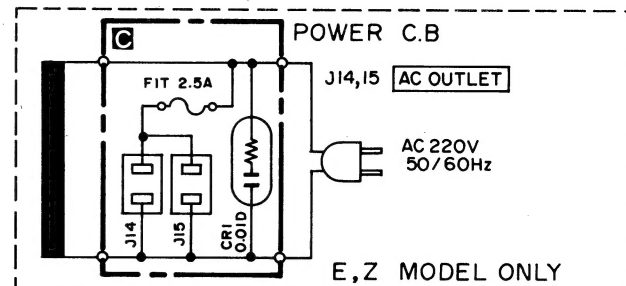
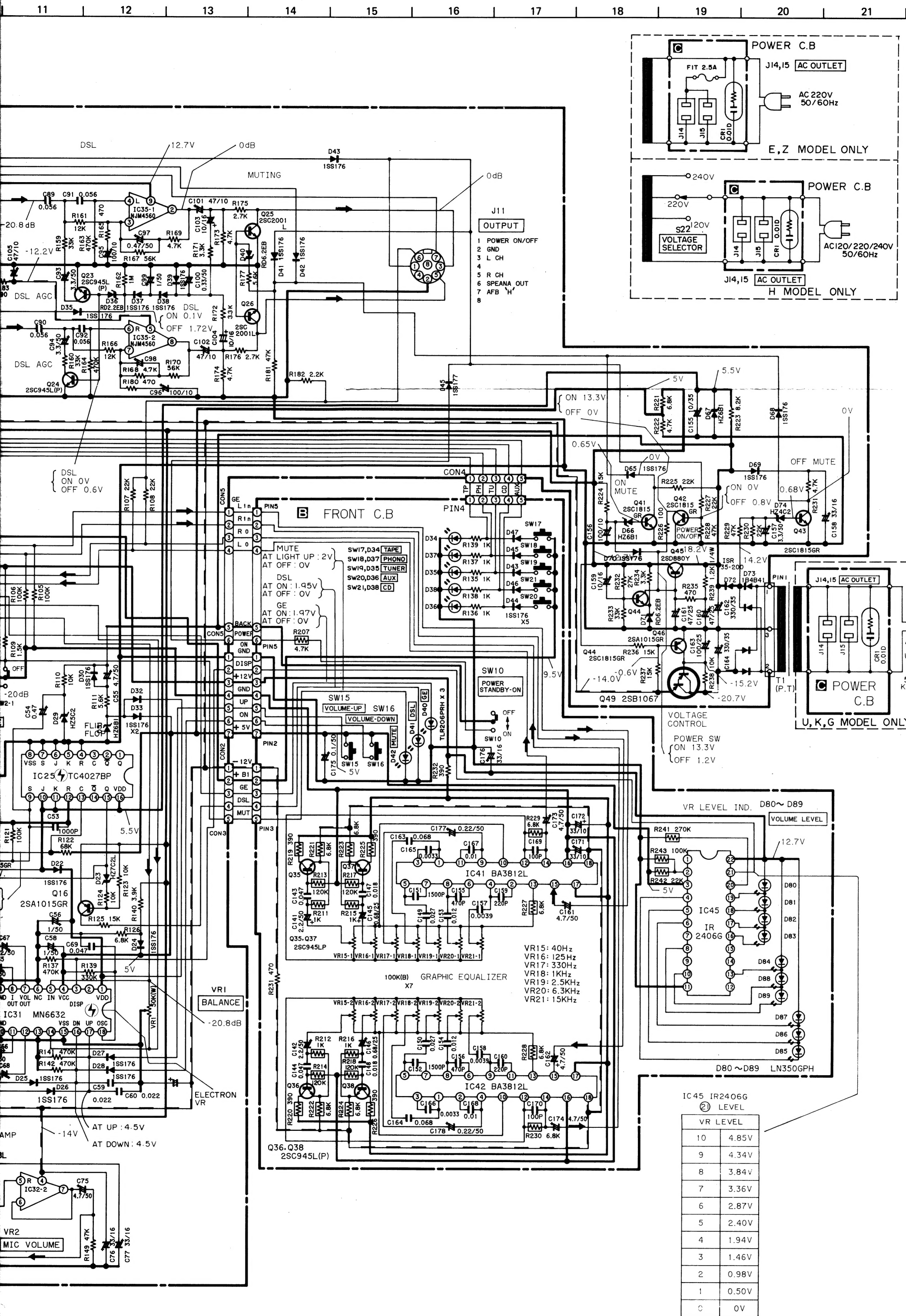
IR2406G



Safety component symbol
This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.
● This schematic diagram is subject to change without notice in the interests of improved performance.

A MAIN C.B

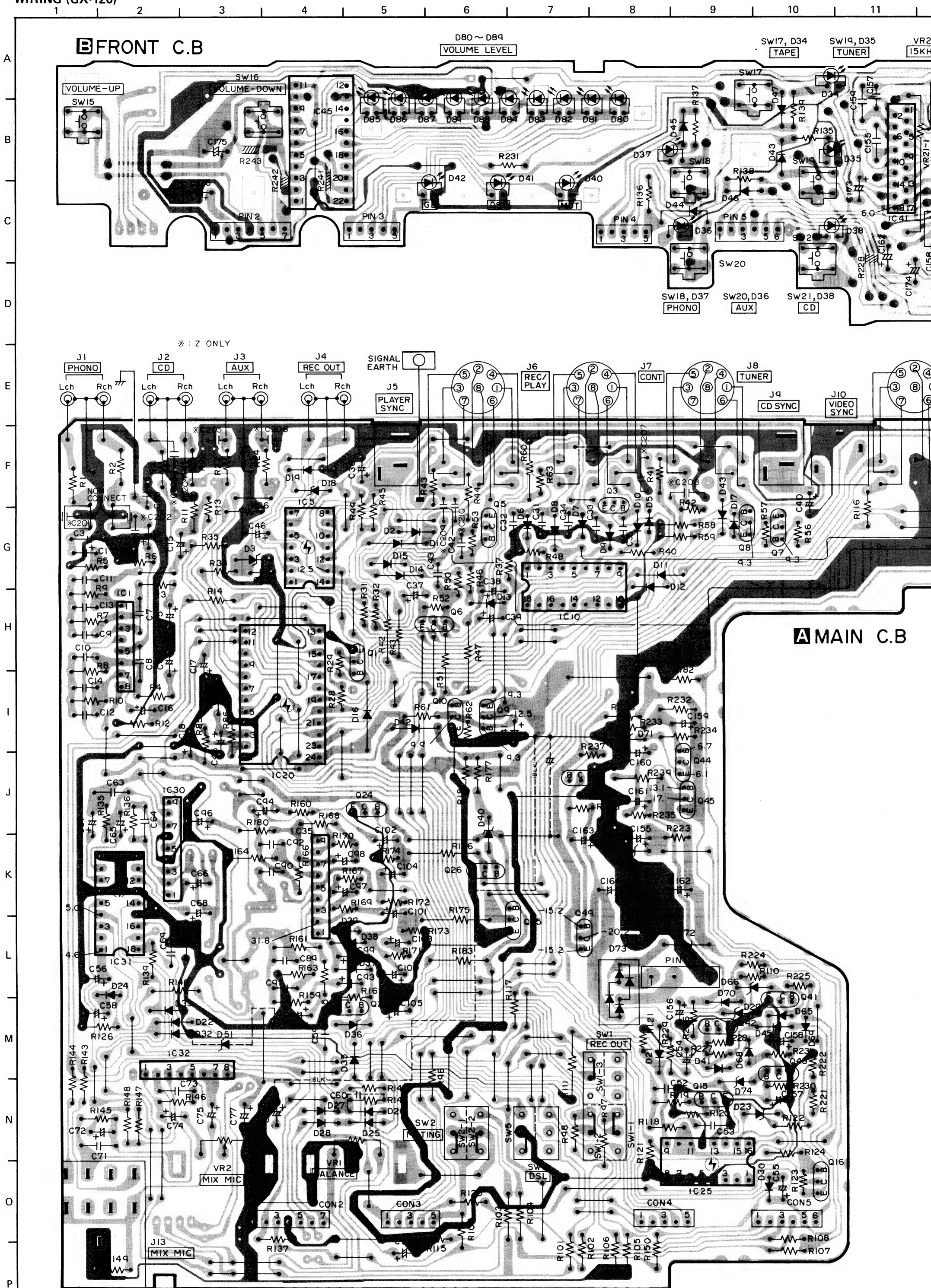


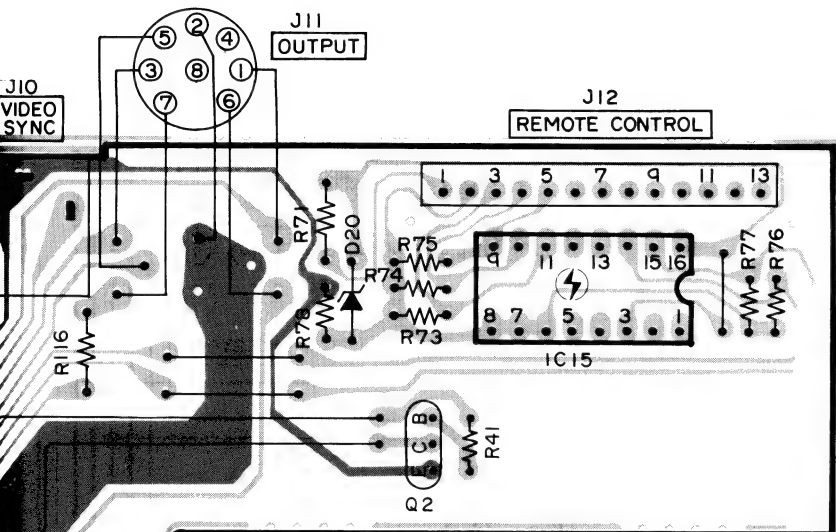
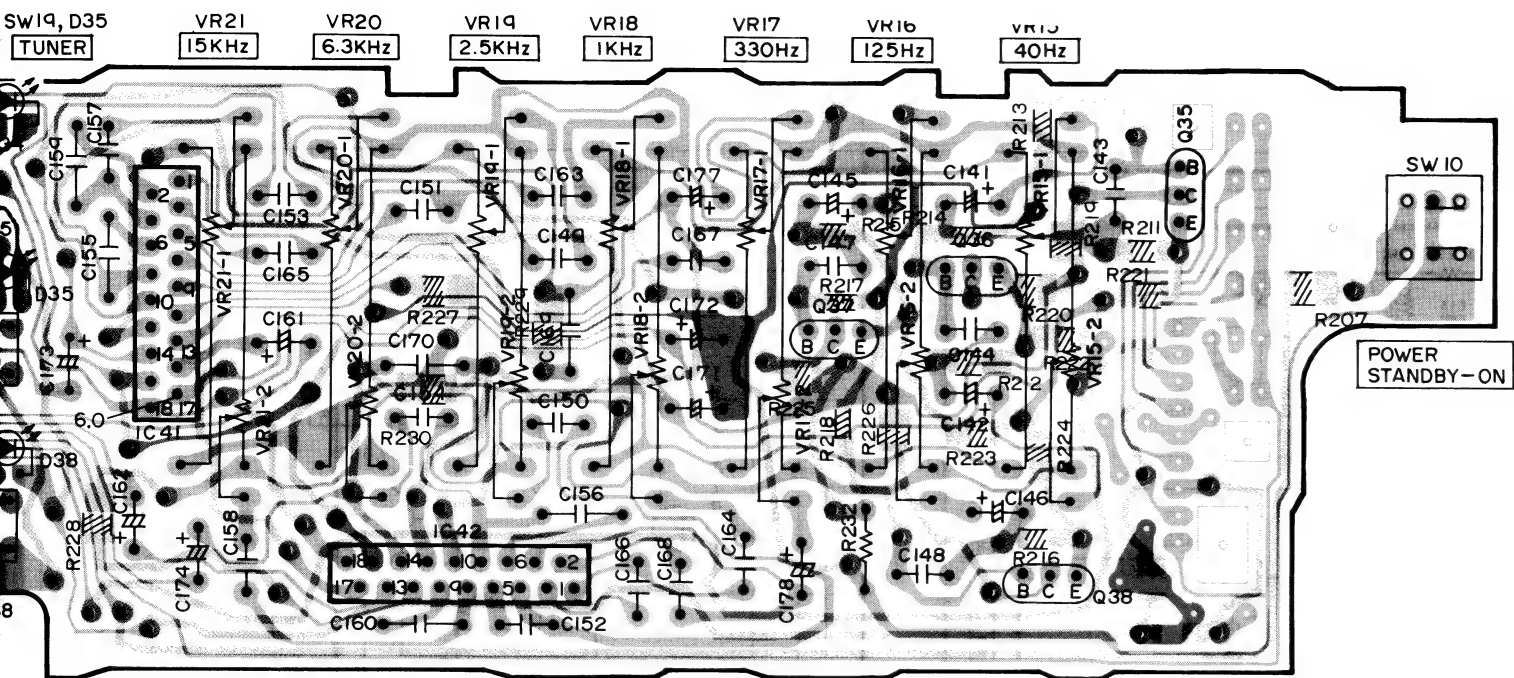


IC45 IR2406G

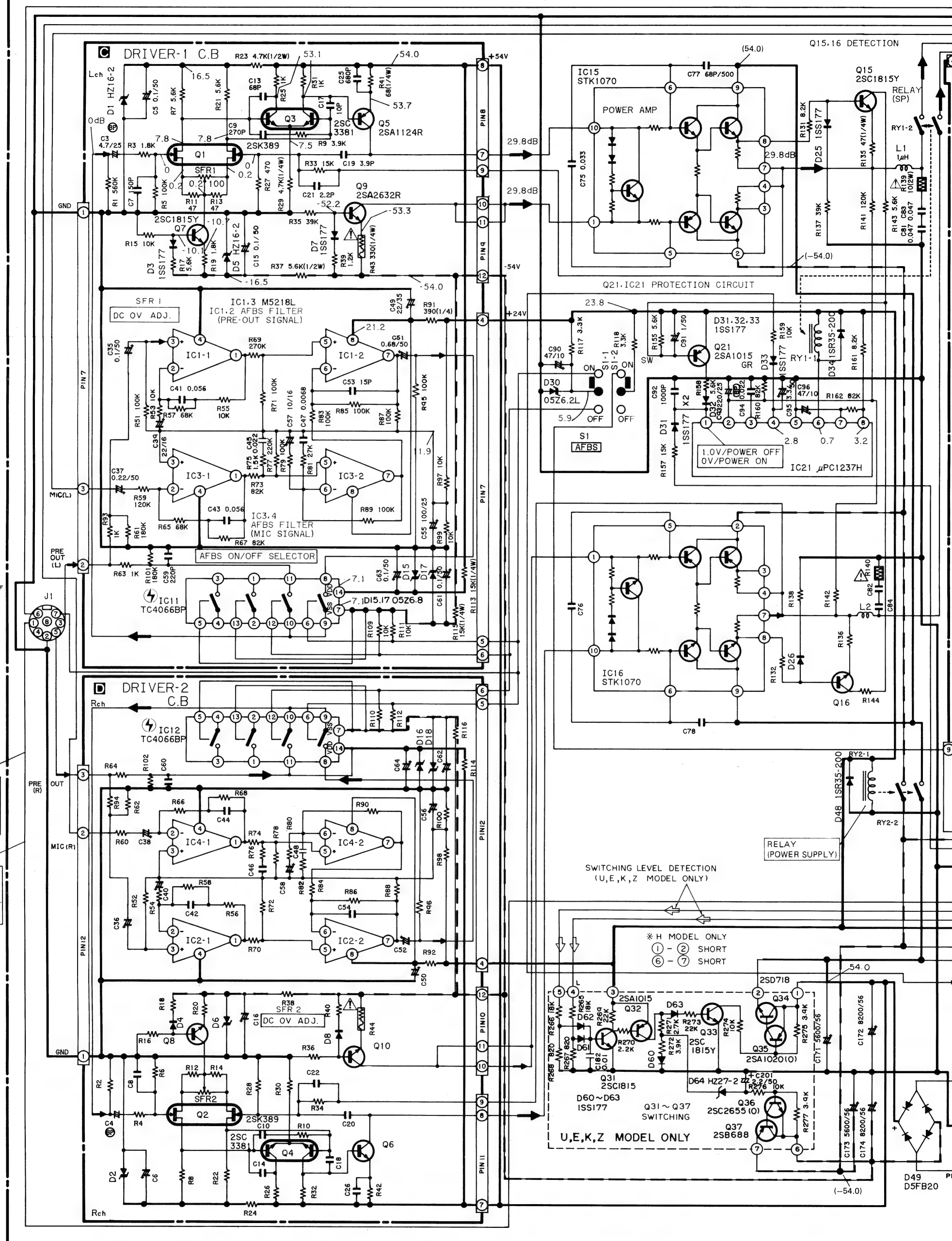
② LEVEL

| VR LEVEL | Voltage |
|----------|---------|
| 10 | 4.85V |
| 9 | 4.34V |
| 8 | 3.84V |
| 7 | 3.36V |
| 6 | 2.87V |
| 5 | 2.40V |
| 4 | 1.94V |
| 3 | 1.46V |
| 2 | 0.98V |
| 1 | 0.50V |
| 0 | 0V |





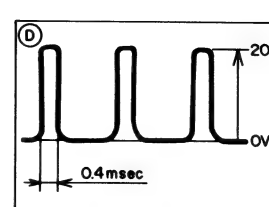
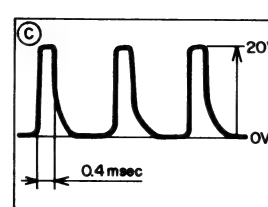
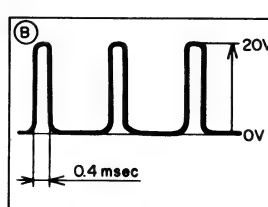
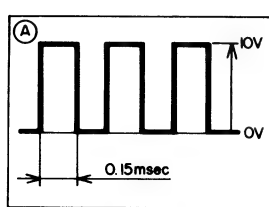
A MAIN C.B



- INPUT**
- ① POWER ON/OFF
 - ② GND
 - ③ PRE OUT (L)
 - ④ NC
 - ⑤ PRE OUT (R)
 - ⑥ SIGNAL INPUT
 - ⑦ AFB 'H'
 - ⑧ NC

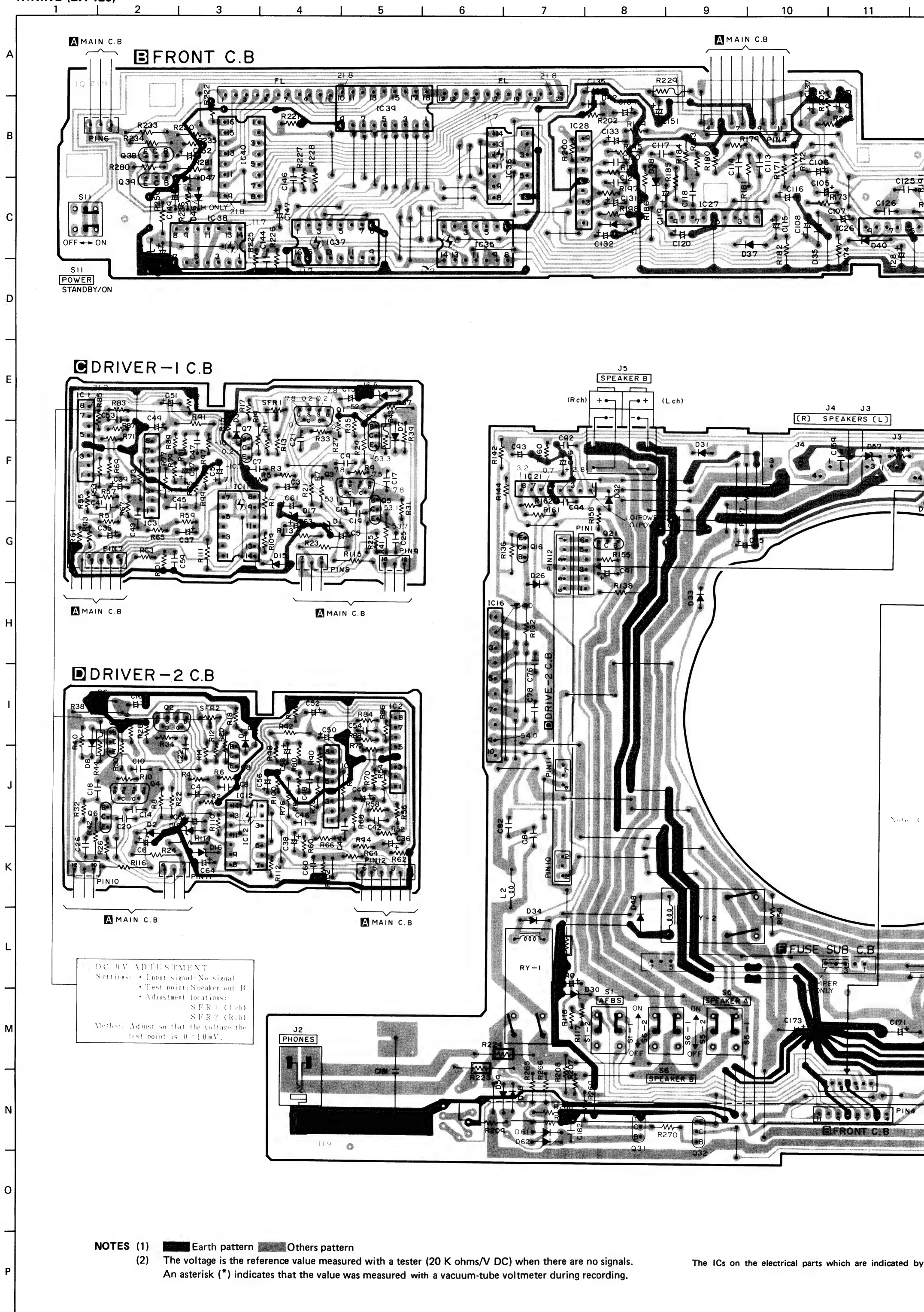
OV/TUNER
POWER SW
ON
20V/TUNER
POWER SW
OFF

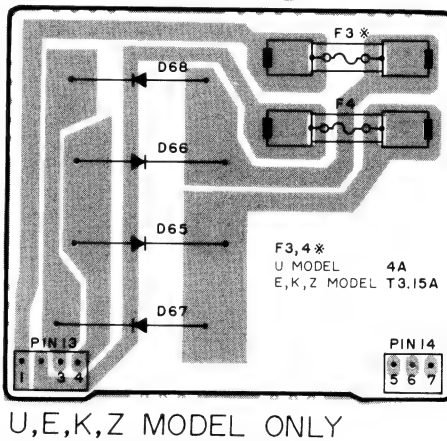
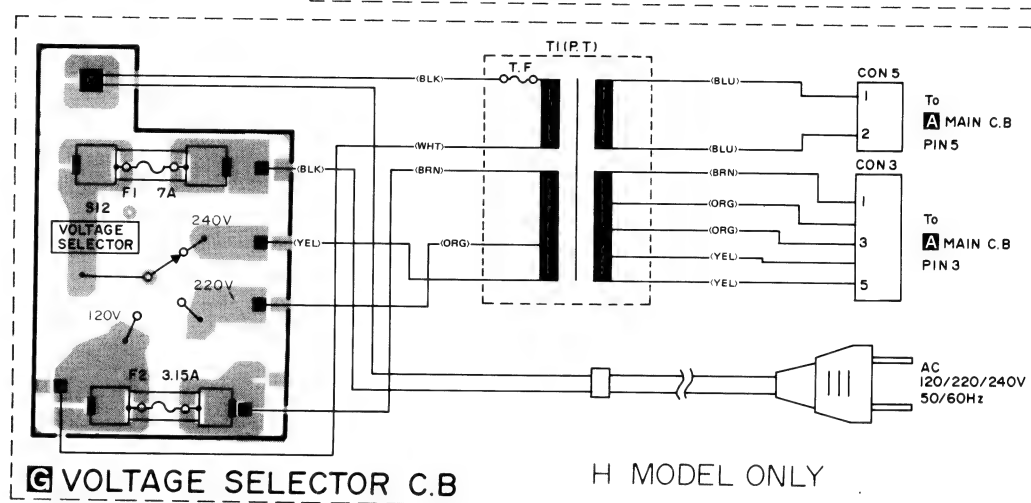
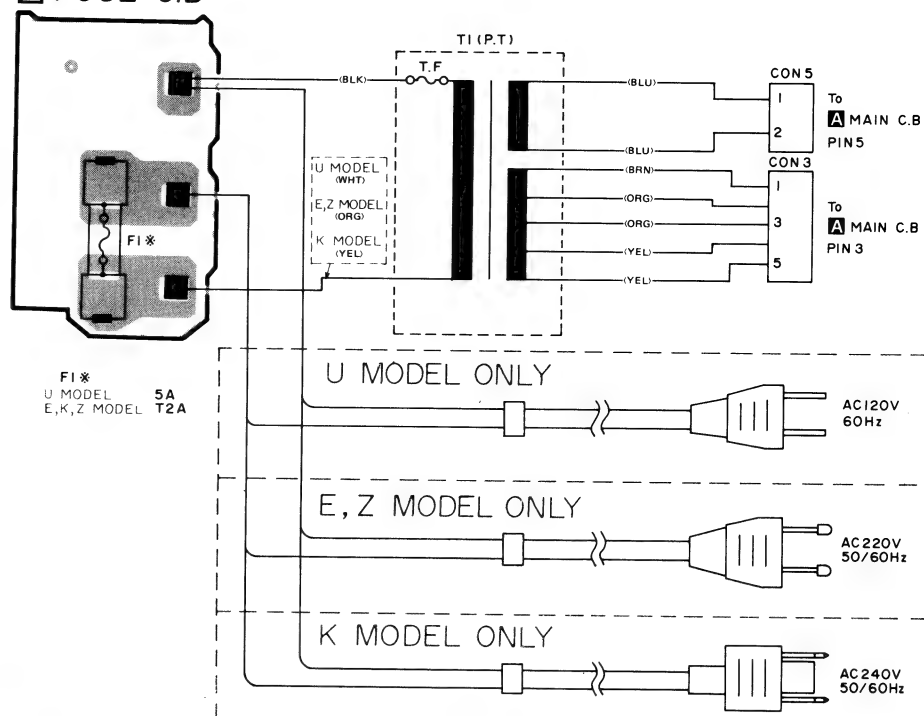
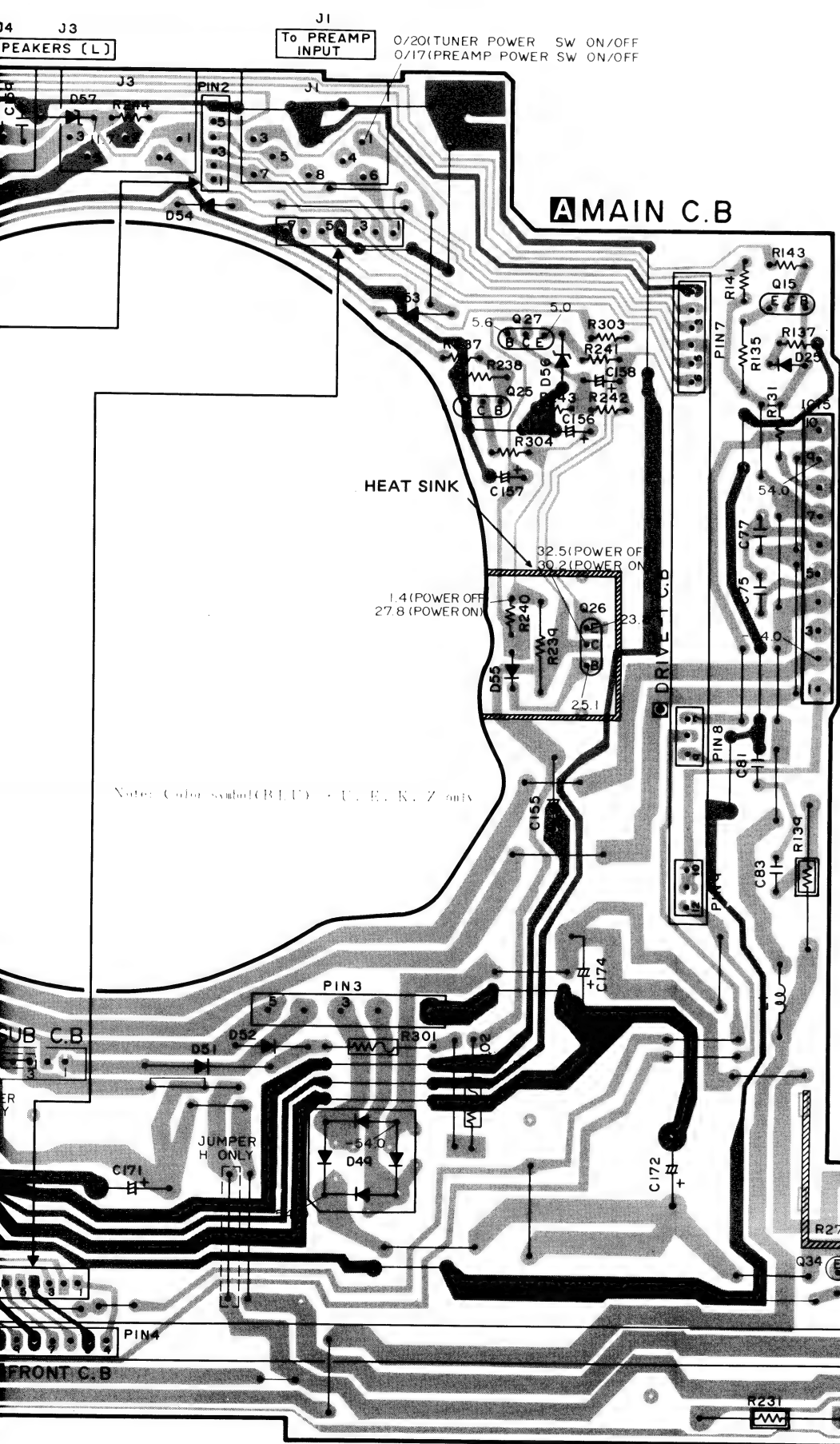
OV/PRE AMP
POWER SW
ON
17V/PRE AMP
POWER SW
OFF



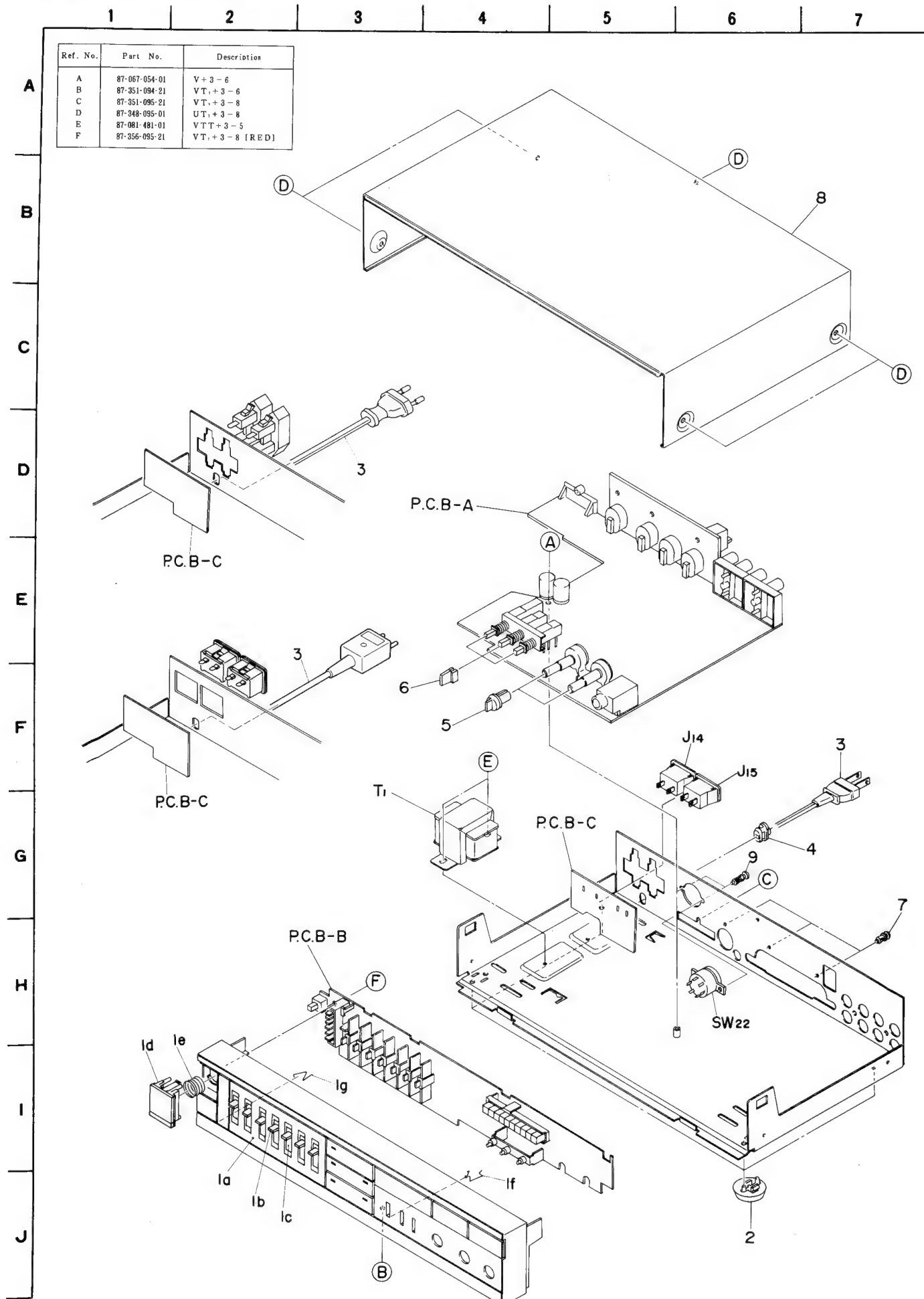
■ B (+) power supply
■ B (-) power supply
→ Signal path
⇨ Rec path

This is a safety circuit. This safety circuit is designed to prevent the system from operating in a dangerous state.

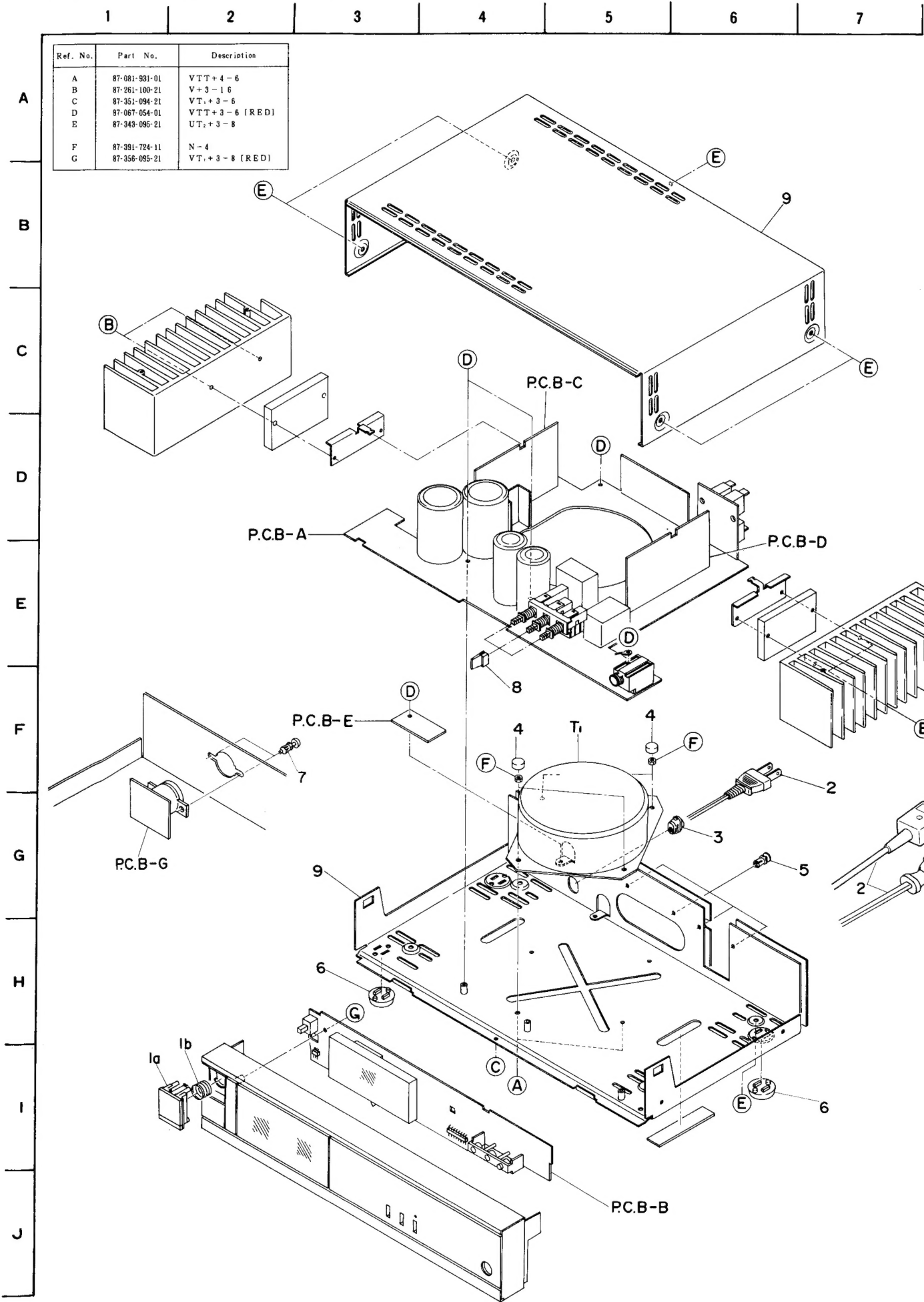




EXPLODED VIEW GX-120



EXPLODED VIEW BX-120



PARTS LIST

MECHANICAL PARTS LIST

●※mark in this part list shows exclusive part
●★mark means less required items and availabilities may be limited.

| Part No. changed to | Ref. No. | Part No. | Description | Common Model | Q'ty |
|------------------------|----------|-------------|-----------------------------|-----------------|------|
| | 1 | ★81-739-028 | FRONT CABINET UB Ass'y | ※ | 1 |
| | 1a | ★81-740-007 | PLATE G | | 1 |
| | 1b | ★81-740-020 | KNOB G | | 7 |
| | 1c | ★81-740-021 | SHEET G | | 7 |
| | 1d | ★81-740-050 | PUSH-KEY POWER B Ass'y | | 1 |
| | 1e | ★81-740-208 | C-SPRING, POWER | | 1 |
| | 1f | ★81-740-211 | T-SPRING, A | | 1 |
| | 1g | ★81-740-212 | T-SPRING, B | | 1 |
| | 2 | ★87-055-057 | FOOT B | | 4 |
| | 3 | ★87-034-992 | AC POWER CORD (H only) | | 1 |
| | | ★87-034-578 | AC POWER CORD (U only) | | 1 |
| | | ★82-788-674 | AC POWER CORD (E, Z only) | | 1 |
| | | ★87-034-708 | AC POWER CORD (K only) | | 1 |
| | 4 | ★87-085-184 | CORD BUSHING (H, U only) | | 1 |
| | | ★87-085-185 | CORD BUSHING (E, K, Z only) | | 1 |
| | 5 | ★82-192-040 | KNOB, B | FX-30 | 2 |
| | 6 | ★82-798-023 | PUSH-BUTTON, MUT | MX-90 | 3 |
| | 7 | ★87-085-102 | NYLON RIVET 3.5-5.5 | | 3 |
| | 8 | ★81-735-056 | STEEL CABINET TB | | 1 |
| | 9 | ★87-085-090 | NYLON RIVET 3-6.5 (H only) | | 2 |

PARTS LIST

MECHANICAL PARTS LIST

●※ mark in this part list stows exclusive part.
 ●★-mark means less required items and availabilities may be limited.

| Part No. changed to | Ref. No. | Part No. | Description | Common Model | Q'ty | |
|------------------------|----------|-------------|-----------------------------|-----------------|------|--|
| | 1 | ★81-738-028 | FRONT CABINET UB Ass'y | ※ | 1 | |
| | 1a | ★81-740-050 | PUSH-KEY POWER B Ass'y | | 1 | |
| | 1b | ★81-740-208 | C-SPRING, POWER | | 1 | |
| | 2 | ★87-034-992 | AC POWER CORD (H only) | | 1 | |
| | | ★87-034-578 | AC POWER CORD (U only) | | 1 | |
| | | ★82-788-674 | AC POWER CORD (E, Z only) | | 1 | |
| | | ★87-034-708 | AC POWER CORD (K only) | | 1 | |
| | 3 | ★87-085-184 | CORD BUSHING (H, U only) | | 1 | |
| | | ★87-085-185 | CORD BUSHING (E, K, Z only) | | 1 | |
| | 4 | ★82-781-206 | PLATE NUT | SA-P 80 | 2 | |
| | 5 | ★87-085-102 | NYLON RIVET 3.5-5.5 | | 4 | |
| | 6 | ★87-055-057 | FOOT B | | 4 | |
| | 7 | ★87-085-090 | NYLON RIVET 3-6.5 (H only) | | 2 | |
| | 8 | ★82-798-023 | PUSH-BUTTON, MUT | MX-90 | 3 | |
| | 9 | ★81-738-035 | STEEL CABINET PB | ※ | 1 | |

■ ACCESSORIES/PACKAGE LIST

GX-120

| Part No. changed to | Ref. No. | Part No. | Description | Common Model | Q'ty | |
|------------------------|----------|------------|---------------------|-----------------|------|--|
| | 1 | 81-739-904 | INSTRUCTION BOOKLET | ※ | 1 | |

BX-120

| Part No. changed to | Ref. No. | Part No. | Description | Common Model | Q'ty | |
|------------------------|----------|-------------|---------------------|-----------------|------|--|
| | 1 | ★81-738-904 | INSTRUCTION BOOKLET | ※ | 1 | |

AIWA Co., Ltd. Tokyo Japan